

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1 to 39 (Canceled)

40. (Previously presented) A method for identifying a compound that inhibits binding of a parathyroid hormone to a parathyroid hormone receptor by competitively binding to the parathyroid hormone receptor, the method comprising:

(a) providing a recombinant polypeptide that: (i) comprises at least 6 amino acids and less than the complete amino acid sequence of a parathyroid hormone receptor, and (ii) binds to parathyroid hormone;

(b) contacting the polypeptide with a parathyroid hormone in the presence of a candidate compound; and

(c) comparing the level of binding of the polypeptide to the parathyroid hormone in the presence of the candidate compound with the level of binding of the polypeptide to the parathyroid hormone in the absence of the candidate compound, wherein a lower level of binding in the presence of the candidate compound than in its absence indicates that the candidate compound competes with parathyroid hormone for binding to the receptor.

41. (Canceled)

42. (Previously presented) The method of claim 40, wherein the sequence of the polypeptide is identical to the sequence of a fragment of a naturally occurring parathyroid hormone receptor.

43. (Currently amended) The method of claim 40, wherein the said sequence of the polypeptide is identical to the sequence of a fragment of a naturally occurring human parathyroid hormone receptor.

44 to 56 (Canceled)

57. (Currently amended) The method of claim 40, wherein the said complete amino acid sequence of the parathyroid hormone receptor in (a)(i) consists of SEQ ID NO:21.

58. (Currently amended) A method for identifying a compound that inhibits the binding of parathyroid hormone to a parathyroid hormone receptor, the method comprising:

(a) providing a recombinant polypeptide that: (i) consists ~~consisting~~ of a fragment of a parathyroid hormone receptor, ~~wherein the polypeptide receptor;~~ and (ii) binds parathyroid hormone or a fragment thereof;

(b) contacting the polypeptide with parathyroid hormone, or a parathyroid hormone receptor-binding fragment thereof, and a test compound; and

(c) determining whether binding of the parathyroid hormone or fragment thereof to the polypeptide is decreased in the presence of the test compound, wherein a decrease in binding indicates that the test compound inhibits the binding of parathyroid hormone to the parathyroid hormone receptor.

59 to 62 (Canceled)

63. (Previously presented) The method of claim 58, wherein the amino acid sequence of the parathyroid hormone receptor consists of SEQ ID NO:21.

64 to 70 (Canceled)

71. (Currently amended) A method for identifying a compound that inhibits the binding of parathyroid hormone to a parathyroid hormone receptor, the method comprising:

- (a) providing a recombinant ~~purified~~ parathyroid hormone receptor or a parathyroid hormone-binding fragment thereof;
- (b) contacting the parathyroid hormone receptor or fragment thereof with parathyroid hormone or a parathyroid receptor-binding fragment thereof, and a test compound; and
- (c) determining whether binding of the parathyroid hormone or fragment thereof to the parathyroid hormone receptor or fragment thereof is decreased in the presence of the test compound, wherein a decrease in binding indicates that the test compound inhibits the binding of parathyroid hormone to the parathyroid hormone receptor.

72. (Previously presented) The method of claim 40, wherein the complete amino acid sequence of the parathyroid hormone receptor in (a)(i) consists of SEQ ID NO:21 with at least one conservative amino acid substitution.

73. (Previously presented) A method for identifying a compound that inhibits binding of a parathyroid hormone to a parathyroid hormone receptor by competitively binding to the parathyroid hormone receptor, the method comprising:

- (a) providing a recombinant polypeptide that: (i) comprises a fragment of a parathyroid hormone receptor, and (ii) binds to parathyroid hormone;
- (b) contacting the polypeptide with a parathyroid hormone in the presence of a candidate compound; and
- (c) comparing the level of binding of the polypeptide to the parathyroid hormone in the presence of the candidate compound with the level of binding of the polypeptide to the parathyroid hormone in the absence of the candidate compound, wherein a lower level of binding in the presence of the candidate compound than in its absence indicates that the candidate compound competes with parathyroid hormone for binding to the receptor.